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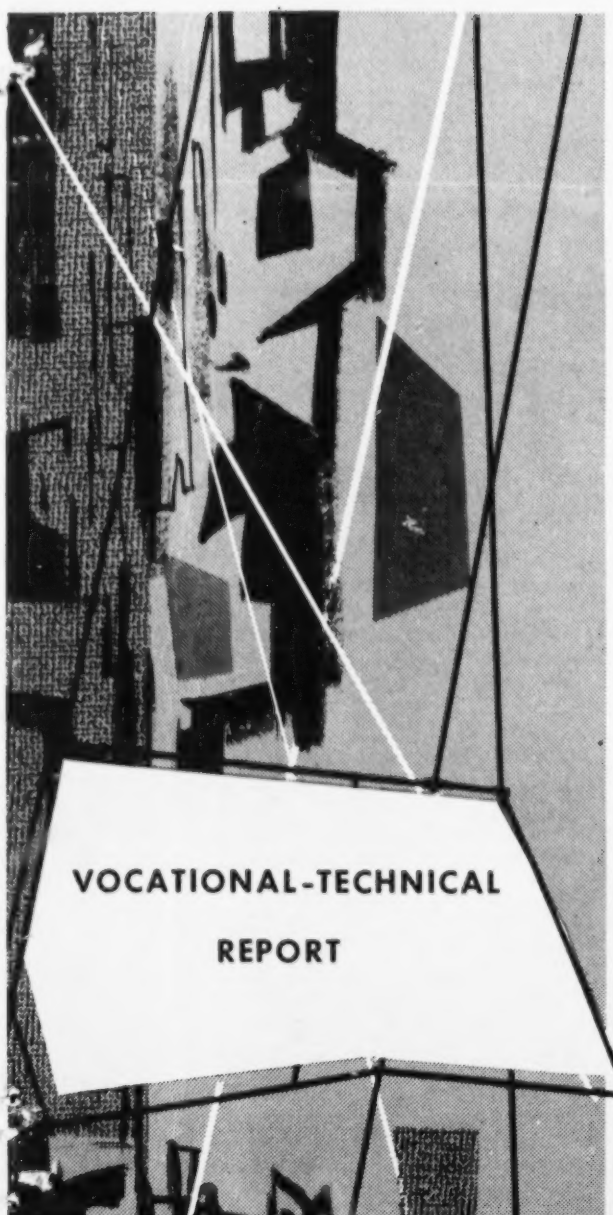
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AUTHOR Little, J. Kenneth; Whinfield, Richard W.
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ABSTRACT

In order to evaluate the employment success of Wisconsin vocational graduates and to measure the extent to which this success is attributable to the vocational program, the Center for Studies in Vocational and Technical Education conducted a followup study of 1,855 graduates. When only 55 percent of the graduates responded, a short form of the questionnaire was distributed to nonrespondents raising the total response rate to 82 percent. Although significant differences between the two groups of respondents prevented generalization of many of the findings, employment and income of graduates were generally good, and for the most part, graduates found that training and work were related and their educational experience was useful in getting, holding, or changing jobs. (BH)

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FOLLOW-UP OF 1965 GRADUATES OF WISCONSIN SCHOOLS OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION

by
J. Kenneth Little
and
Richard W. Whinfield

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CENTER FOR STUDIES IN VOCATIONAL AND TECHNICAL EDUCATION

The University of Wisconsin
Industrial Relations Research Institute

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RESEARCH REPORT

Industrial Relations Research Institute
University of Wisconsin

June 1970

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I. Introduction

In the spring of 1967, the Center for Studies in Vocational and Technical Education, in cooperation with the State Board of Vocational, Technical, and Adult Education, laid plans for a follow-up study of graduates of vocational-technical and adult schools in Wisconsin, the purposes of which were to determine (1) what happened to students who completed these schools, (2) the extent to which the vocational program had been a help to them in obtaining their employment, and (3) the extent to which other factors might have played a role in their selection of a post-high school vocational-technical program and subsequent employment.

The Center developed a questionnaire which was circulated for comments to all directors of vocational, technical, and adult schools in Wisconsin. Subsequent modifications were made on the basis of comments received. The questionnaire was also pretested on ten students who had completed the Madison School of Vocational, Technical, and Adult Education, and additional modifications were made to be certain that the questions were properly worded so that they would be understood. At the same time, the State Director of Vocational, Technical, and Adult Education contacted the local vocational schools requesting rosters of 1965 graduates, including the latest known address. When the questionnaire was in final form and rosters had been received from all schools, the Center prepared a letter,

signed by each director, to be sent along with the questionnaire to each of the graduates on the master list. In all, 1,855 graduates were contacted. The response on the first mailing was 726 persons, or 39.14 percent. The second mailing, a reminder postal card, brought an additional response of 290 completed questionnaires, increasing total percentage return to 54.77. It was decided to try to obtain only basic data from the remaining 45.23 percent of the sample. A short form of the questionnaire was developed, and two mailings of it were made. The response to the first resulted in a response from 21.72 percent, or 403 persons. Ninety-eight persons, or 5.28 percent, responded to the second mailing. Final usable responses were received from 1,517 graduates, or 81.78 percent of the total. Of this group, 1,106 returned the original questionnaire; 501 returned the short form. Of the returns, 865 were from males, 652 were from females.

II. Findings

Since 501 of the responses were on a short form, analysis of the 1,517 responses can deal only with the information on this short form. Additional analysis is made of the 1,106 who responded in full.

Findings for the 1,517 Graduates

Five types of data were available about the total group:

1. The course in which the student had been enrolled.
2. His present occupation.

3. The kind of job he had (of those who were employed).
4. Whether his training was related to his educational experiences.
5. The earnings on his job.

This information, supplied by the students, is set out in Tables 1 through 5. Table 1 shows the courses in which these students were enrolled. There were no reports on 69 students, even though the Center made extensive efforts to determine in what course each student had been enrolled. As seen in Table 1, the program with the largest number of male students is trade and industrial education, while for the females, office occupations and health occupations have over 90 percent of the enrollment.

Table 1. Course Enrollment

Course	Male (No.)	Male (%)	Female (No.)	Female (%)
Office	213	26.63	319	49.23
D.E.	88	11.00	17	2.62
T & I	455	56.88	7	1.08
Agriculture	0	00.00	0	00.00
Apprenticeship	24	3.00	0	00.00
Liberal arts	18	2.25	33	5.09
Health	2	0.25	272	41.98
Total	800	100.00	648	100.00

The absence of enrollments in agriculture courses reflects the urban orientation of the schools. Only one agricultural program was operating in these schools in 1965, and it had no graduates. This situation has changed since then, but not in proportion to the size

of the agricultural labor force. Distributive education programs also did not have many graduates. Like agriculture, it is not represented in proportion to the frequency of sales occupations in the labor force. Apparently pre-employment sales training is not frequently required for employment in this occupation.

Table 2 shows how these graduates were occupied at the time they completed the questionnaire. A total of 1,114 were occupied full-time in a job, school, the armed service, or homemaking; 39 or 2.5 percent were unemployed. The unemployment experiences of these students was at a lower level than the national average of 3.4 percent at the time of the study. No data were available on 37 of the students. Of the unemployed, almost two-thirds were women.

A substantial number of males were in the armed services, and, if they were counted among the employed, the male employment percentage would rise to 91.10 percent.

Table 2. How Graduates Were Occupied in 1967

Occup. Category	Male (No.)	Male (%)	Female (No.)	Female (%)
N.A.	18	2.08	19	2.91
Job	620	71.68	494	75.77
School	39	4.51	18	2.76
Service	168	19.42	2	0.13
Homemaking	6	0.69	94	14.42
Unemployed	14	1.62	25	3.83
Total	865	100.00	652	100.00

Table 3 shows the labor market categories in which the graduates were employed. The graduates who were in service were classified if they defined their jobs. Homemakers were classified under service occupations.

Table 3. Employment at the Time of Completion of Questionnaire

Occup. Category	Male (No.)	Male (%)	Female (No.)	Female (%)
Professional	91	11.96	20	3.14
Farming	11	1.45	0	00.00
Managing	33	4.34	1	0.16
Clerical	57	7.49	342	53.77
Sales	43	5.65	10	1.57
Craftsman	342	44.94	19	2.99
Operating	110	14.45	18	2.83
Service	60	7.88	225	35.38
Labor	14	1.84	1	0.16
Total	761	100.00	636	100.00

In response to the question, "Was your training related to your present job," 52 percent stated that it was closely related, 29.19 percent stated it was somewhat related, 12.99 percent stated that it was unrelated. The significant figure would seem to be the number who felt it was unrelated. It is possible that these persons could not find employment in their field of training, would not move to obtain employment, or found jobs which offered better returns or were otherwise more satisfactory.

Eighty-six percent did find that their educational experience was relevant to their present job. Whether this refers to skills or knowledge is not known.

Table 4. Was Training Related to Present Job?

Reply	Male (No.)	Male (%)	Female (No.)	Female (%)
No Response	144	16.65	52	7.98
Close	369	42.65	361	55.37
Somewhat	225	26.01	184	28.22
Unrelated	127	14.78	55	8.43
Total	865	100.00	652	100.00

Income on the current job was reported as dollars per month (Table 5). Males averaged \$485.08 per month; females averaged \$325.41 per month. The range for the males ran \$50 a month to over \$1,000 a month. For the females, from \$50 to \$625 a month. While comparable data for the age group of the general population are not available, the estimated average earning in manufacturing industries in Wisconsin in September 1967 was \$498 per month for males.¹ The lower average monthly income for graduates probably reflects an average closer to the probable average entry wage.

The general finding is that the employment experience of the graduates has been good, that their training was generally related to their occupation, and that their income level is slightly above the mean for persons of that age group (1967 Census Report).

¹Wisconsin Work Force, Wisconsin Department of Industry, Labor, and Human Relations, Sept. 1967.

Table 5. Monthly Income at Time of Completion of Questionnaire

<u>Income (Monthly)</u>	<u>Male (No.)</u>	<u>Male (%)</u>	<u>Female (No.)</u>	<u>Female (%)</u>
0-50	2	0.32	0	00.00
51-100	4	0.63	7	1.25
101-150	6	0.95	6	1.07
151-200	15	2.38	23	4.10
201-250	25	3.96	57	10.16
251-300	24	3.80	134	23.89
301-350	41	6.50	129	22.99
351-400	95	15.06	118	21.03
401-450	71	11.25	52	9.27
451-500	112	17.75	23	4.10
501-550	78	12.36	7	1.25
551-600	88	13.95	4	0.71
601-650	26	4.12	1	0.18
651-700	11	1.74	0	00.00
701-750	15	2.38	0	0.00
751-800	13	2.06	0	0.00
801-850	2	0.32	0	0.00
851-900	0	0.00	0	0.00
901-950	0	0.00	0	0.00
951-1000	2	0.32	0	0.00
Total	640	100.00	561	100.00
Average	\$458.08		\$325.41	

Comparison of Graduates Who Answered the Long-Form Questionnaire with Graduates Who Answered a Short-Form Questionnaire

An 81 06 percent response to a questionnaire is generally considered quite adequate for reporting purposes; however, only 55 percent of the 1965 graduates completed the full questionnaire. How different were the graduates who completed the long form from those who completed the short form? Tests of comparisons using chi square were made on the above variables. Table 6 shows the results.

Table 6. Comparison of Graduates Who Responded to the Long-Form Questionnaire and Graduates Who Responded to the Short-Form

	Males			Females		
	Number	X ²	Dif.	Number	X ²	Dif.
Full-time job	865	20.41	6*	652	36.08	6*
Regular job	761	6.85	8	636	6.41	8
Training related to Present job	761	22.60	3*	640	21.08	3*
Present pay	631	43.81	18*	561	35.32	11*

*Significant at .01 level.

The graduates who answered the short form appear to be significantly different on all variables but one. Two details relative to the above tables are used to illustrate the differences. On the question of whether training was related to present job, 13 percent of the "long-form" graduates and 23 percent of the "short-form" graduates reported that the training and present job were unrelated. Six percent of the females responding on the long form and 14 percent of the females responding on the short form reported that training was unrelated to their present job. This suggests that one reason for nonresponse may be lack of relationship of education to their jobs.

For the present income, the mean for the male graduates who reported on the long form was \$459.45; for those who reported on the short form, the mean \$460.36. This is not a significant difference. The difference arises in the distribution of these incomes: 17.10 percent of the "long-form" graduates were below \$350, while

19.31 percent of the "short-form" graduates were below this figure. On the other end of the scale, 23.47 percent of the "long-form" group and 27.92 percent of the "short-form" group were above \$550.00. The spread of the "short-form" group was much broader than that of the "long-form" group. The same situation existed for the females, but in addition there was a significant difference between the average incomes. The females who completed the short form had an average income of \$308.65; for the "long-form" females, the average income was \$331.53. Since these significant differences do exist, the report of the students' responses on the long questionnaire cannot be generalized to the total graduating class. However, since it does represent more than half of the graduates, it is useful to examine what the responses reveal.

Responses to the Long-Form Questionnaire

1. How Are the Graduates Presently Occupied?

Table 7 shows how the graduates were occupying themselves full time. Of the males, 398 were engaged in full-time employment; 106 were in the armed services. These two results combine for a total present employment of 501 or 91.47 percent of the males, with only 2 percent unemployed. Of the females, 94.57 percent were either employed or were homemakers; only 1.94 percent were unemployed. The employment categories were not significantly different for the "long-form" group as compared to the "short-form" group. Table 8, when compared to Table 1, would tend to verify, in a rough way, the

responses made by the graduates as to whether or not their present jobs were related to their training. Of the males, 60 percent were engaged as craftsmen or operatives, and 56 percent had been enrolled in trade and industrial programs. Fifty-two percent of the females were employed in clerical occupations, and 49.23 percent had been enrolled in office courses.

Table 7. How Occupied Full-Time

Activity	Male (No.)	Male (%)	Female (No.)	Female (%)
N.A.	6	1.08	7	1.51
Job	398	72.23	369	79.35
School	30	5.44	9	1.94
Service	106	19.24	1	0.22
Homemaking	0	0.00	70	15.05
Unemployed	11	2.00	9	1.94
Total	551	100.00	465	100.00

Table 8. Present Occupational Category

Occup. Category	Male (No.)	Male (%)	Female (No.)	Female (%)
Professional	53	10.58	15	3.28
Farming	7	1.40	0	0.00
Managing	19	3.79	1	.22
Clerical	39	7.78	241	52.62
Sales	25	4.99	7	1.53
Craftsman	236	47.11	17	3.71
Operations	71	14.17	13	2.84
Service	43	8.58	164	35.81
Labor	8	1.60	0	0.00
Total	501	100.00	458	100.00

2. Employment

a. Present Employment. Table 9 illustrates the businesses and industries in which the graduates were employed. For the males, the largest group is employed in "manufacture of durable goods." For the females, the major employment is in the service industry. This distribution raises a question about the training policies of the vocational schools and whether or not the businesses and industries which are hiring few graduates of Wisconsin schools of

Table 9. Employer

Industrial Cat.	Male (No.)	Male (%)	Female (No.)	Female (%)
Agriculture	12	1.40	1	0.15
Forestry	0	0.00	2	0.31
Mining	0	0.00	0	0.00
Construction	25	2.91	2	0.31
Manufacture (durable)	201	23.43	50	7.73
Manufacture (non-dur.)	12	1.40	5	0.77
Transportation	23	2.68	7	1.08
Commercial	16	1.86	11	1.70
Public utilities	8	0.93	1	0.15
Trade	83	9.67	40	6.18
Service	36	4.20	231	35.70
Education	14	1.63	50	7.73
Finance	25	2.91	35	5.41
Government	64	7.46	21	3.25
Unknown	339	39.51	191	29.52
Total	858	100.00	647	100.00

vocational, technical, and adult education do in fact need some training help. It can be seen in the kinds of courses in which students enrolled (Table 1) that there were no graduates in the field of agriculture in 1965.

Table 9 shows that the categories of forestry and mining have almost no persons employed from vocational, technical and adult schools, and construction has a surprisingly low number of persons. Transportation, commerce, and public utilities have also employed low numbers of graduates.

Finally, the average starting salary on the present job was \$357.53 for males and \$271.76 for females. The difference between the starting income and the present income (Table 3) represents an average increase of \$100.55 for the males and \$53.65 for the females over a two-year period.

b. Unemployment. Table 10 shows that during the two years since leaving school, 101 males and 172 females experienced unemployment--in a substantial number of instances for personal reasons

Table 10. Cause of Unemployment

Cause	Male (No.)	Male (%)	Female (No.)	Female (%)
No job available	19	18.28	22	12.36
Required moving	4	3.88	12	6.68
Personal reasons	31	29.84	68	39.92
Marriage	0	0.00	29	16.48
Other	50	48.08	41	23.44
Total	101	100.00	172	100.00

such as illness or family problems. The length of unemployment was generally under six months. However, seven males experienced unemployment for periods ranging from six months to two years and 21 females experienced unemployment for up to two years. Eleven males and nine females were still unemployed at the time of the study.

c. Armed Service. Only one female was in the service after graduation and she was still in service at the time she completed the questionnaire. Of the males, 106 were in service at the time they completed the questionnaires, 89 others had been in service prior to enrollment in the vocational, technical, or adult school, and 88 had been in service after they enrolled and were now out of service. Sixty-eight of the graduates had been in service one year or less--78 for up to two years and 139 for more than two years.

d. First Job. A total of 232 males and 227 females had had a first job different from their present job. The distribution of these jobs also was somewhat different from the distribution of the present jobs (Table 11). A larger percent of the males were in professional jobs in their present employment (Table 3) than in their first jobs, and a significantly higher percent were employed as laborers in their first jobs than were employed as laborers in their present jobs. This probably indicates upward job mobility though it is possible that the desired employment opportunities were not immediately available upon graduation and an interim job was necessary. The females had similar employment experiences. The starting average pay on the first job was \$336.82 for males, and \$254.50 for females, compared to the starting average salary of the present job of \$357.53 for the males and \$271.76 for the females.

Table 11. First Full-Time Job

Occup. Category	Male (No.)	Male (%)	Female (No.)	Female (%)
Professional	21	5.48	6	1.77
Farming	0	0.00	0	0.00
Managing	5	1.31	0	0.00
Clerical	30	7.83	124	36.58
Sales	19	4.96	6	1.77
Craftsman	99	25.85	5	1.47
Operating	43	11.23	5	1.47
Service	15	3.92	83	24.48
Labor	151	39.43	110	32.45
Total	383	100.00	339	100.00

Graduates were not employed in significantly different businesses and industries (Table 12) on their first jobs than they were on their present jobs, which may be an indication of an industry employment practice of starting new hires out as laborers, and when vacancies occur in other occupational categories filling them with qualified persons from the laboring group.

Table 12. Employer for First Job

Industrial Cat.	Male (No.)	Male (%)	Female (No.)	Female (%)
Agriculture	3	1.29	1	0.44
Forestry	0	0.00	0	0.00
Mining	0	0.00	0	0.00
Construction	18	7.76	0	0.00
Manufacture (durable)	79	34.05	15	6.61
Manufacture (non-durable)	12	5.17	7	3.08
Transportation	13	5.60	3	1.32
Commercial	9	3.87	4	1.76
Public utilities	4	1.72	3	1.32
Trade	63	27.16	27	11.89
Service	20	8.62	119	52.42
Education	3	1.29	19	8.37
Finance	5	2.16	20	8.81
Government	2	0.86	8	3.52
Other	11	4.30	1	0.44
Total	232	100.00	227	100.00

e. How Did Graduates Learn of Their Jobs? Table 13 illustrates how the graduates learned of their first jobs, and Table 14 shows how they learned of their present jobs. For the first job, the largest percentage of males inquired of the company; a large percent of the females received aid from the guidance counselor. Guidance counselors were the second most frequently identified source of occupations for the males. These two sources account for the job information of 50.03 percent of the males and 55.78 percent of the females.

Table 13. How Did You Learn of Your First Job?

Information Source	Male (No.)	Male (%)	Female (No.)	Female (%)
Wis. E.S.	25	10.29	23	9.50
Private agency	10	4.12	12	4.96
Counselor	58	23.87	81	33.47
Want ads	30	12.35	20	8.26
Inquired at company	66	27.16	54	22.31
Urged by company	12	4.94	12	4.96
Urged by friend/rel.	20	8.23	13	5.37
Previous work	13	5.35	18	7.44
Test	0	0.00	0	0.00
Urged by employer	2	0.41	1	0.41
Assigned	0	0.00	0	0.00
Other	7	2.88	8	3.31
Total	243	100.00	242	100.00

Placement on the present job, however, was somewhat different (Table 14). While school counselors were helpful to 35 males, there were no females who found school counseling helpful. This may be because they did not approach the school. The Wisconsin State Employment Service and want ads became important sources of job

information for those who changed jobs. Such factors previously thought to be important in gaining employment, such as the urging of the company, urging of friends, previous work experience, and private employment agencies, did not seem to be significant sources of information. Interestingly, only one person had his own business.

Table 14. How Did You Learn of Your Present Job?

Information Source	Male (No.)	Male (%)	Female (No.)	Female (%)
Wis. E.S.	9	3.64	22	12.64
Private agency	1	0.40	7	4.02
Counselor	35	14.17	0	0.00
Want ads	31	12.55	24	13.79
Inquired at company	74	29.96	50	28.74
Urged by company	14	5.67	19	10.92
Urged by friend/rel.	5	2.02	21	12.07
Previous work	3	1.21	1	0.57
Test	1	0.40	0	0.00
Urged by employer	12	4.86	11	6.32
Assigned	0	0.00	1	0.57
Own business	1	0.40	0	0.00
Other	61	24.70	18	10.34
Total	247	100.00	174	100.00

f. Part-Time Experiences. It is frequently thought that many persons hold down two jobs, one which they consider as their full-time employment, the other as a part-time job. Only 102 or 18.51 percent of the males and 125 or 27.00 percent of the females (Table 15) reported any part-time activity, and less than half of these, 34.31 percent of the males and 39.10 percent of the females, had part-time jobs. The consideration of 50.79 percent of the females that homemaking is a part-time activity is a reflection of their perceived role as full-time employees.

Table 15. How Occupied Part-Time

Activity	Male (No.)	Male (%)	Female (No.)	Female (%)
Job	35	34.31	48	39.10
School	48	47.06	12	9.52
Service	19	18.63	1	.79
Homemaking	0	0.00	64	50.79
Total	102	100.00	125	100.00

g. Future Plans. Table 16 shows the student's future plans. Over two-thirds of all the females intend to remain in their present jobs. Nine percent of the males and 3 percent of the females are planning on occupational shifts and 22 percent of the males and 26 percent of the females are undecided about their futures. There seems to be a modest stability in employment. The number of persons who were undecided is somewhat disconcerting. Whether this shows discontentment or an unsureness about upward job mobility, or of their competence, is not known.

Table 16. Future Plans

Plans	Male (No.)	Male (%)	Female (No.)	Female (%)
Remain	357	68.79	314	69.93
Shift	47	9.06	17	3.79
Undecided	115	22.16	118	26.28
Total	519	100.00	449	100.00

Influences on Choice of a Technical Program

a. Kinds of Experience. Students who had been in service were asked whether they had to receive special training. Table 17 shows the kind of training they received.

Table 17. Kind of Training Received in Service

Training	Male (No.)	Male (%)
Repair	47	55.29
Security and law enforcement	8	9.41
Construction	7	8.24
Supply	19	22.35
Many specialties	4	4.71
<u>Total</u>	85	100.00

All students were asked if they had had any job-related experiences in their spare time which they did not acquire in the school; 126 males and 53 females indicated that they had had such experiences, and the skills or the method by which they acquired them are shown in Table 18.

Table 18. Skills Obtained Through a Variety of Job-Related Experiences

Skills	Male (No.)	Male (%)	Female (No.)	Female (%)
Specific on-the-job training	26	20.63	18	33.96
General on-the-job training	42	33.33	19	35.85
Correspondence	2	1.59	1	1.89
Hobby	12	9.52	1	1.89
Terminology	1	0.79	1	1.89
Specific skills	30	23.81	7	13.21
Communication skills	10	7.93	6	11.32
Learned to think	3	2.38	0	00.00
<u>Total</u>	126	100.00	53	100.00

Graduates were asked if they obtained any skills in the summer or on part-time jobs. Table 19 shows the responses to this question.

Table 19. Skills Obtained Through Summer and Part-Time Jobs

Skill	Male (No.)	Male (%)	Female (No.)	Female (%)
On-the-job training (specific)	25	19.84	14	27.45
On-the-job training (general)	67	53.17	25	49.02
Correspondence	0	0.00	0	0.00
Hobby	1	0.79	0	0.00
Terminology	3	2.38	0	0.00
Specific skill	22	17.46	7	13.73
Communication skills	8	6.35	5	9.80
Learned to think	0	0.00	0	0.00
Total	126	100.00	51	100.00

The responses shown in Tables 18 and 19 were given to an open-ended question, "describe these skills." The graduates, rather than describing, most frequently responded by telling how they acquired the skill; the result is a mixture of responses. The first four categories relate to how the skill was obtained; the second four to the kinds of skills. Since these were merely different responses to the same question, no particular significance can be attached to the differences. It does show that there were 126 males (or 22.87 percent) and 53 (or 11.40 percent) females who had had job-related experiences. In all, 126 (22.87 percent) of the males and 53 (10.97 percent) of the females had gained skills on part-time or summer jobs. How many of these were the same individuals is unknown.

b. Influence of Experience. Table 20 illustrates the importance that students attach to their experience as it affected their choice of vocational program. There were 126 males responses (22.87 percent) indicating that one or more of these experiences

were important in choosing their training programs. An additional 140 of the males, or 25.40 percent, indicated that these experiences were of "some" value. The female response was less significant. Only 33, or 7.10 percent, of the responses indicated very much influence of experience on their choice of training program, and 28, or 6.21 percent, indicated some relationship. It is not known, however, how many males or females gave multiple responses to this question.

Table 20. Did Experiences Influence Your Decision to Get Further Training in the Same Field?

Males	<u>Very much</u>		<u>Some</u>		<u>None</u>		<u>Not Applic.</u>		<u>Total</u>	
	No.	%	No.	%	No.	%	No.	%	No.	%
Armed service	36	6.53	35	6.35	10	1.81	470	85.30	551	100.00
Job-related	51	9.26	56	10.16	28	5.08	416	75.50	551	100.00
Part-time emp.	39	7.08	49	8.89	43	7.80	420	76.23	551	100.00
Total	126		140		81					
<u>Females</u>										
Job-related	19	4.09	14	3.01	16	3.44	416	89.46	465	100.00
Part-time emp.	14	3.01	14	3.01	24	5.16	413	88.81	465	100.00
Total	33		28		40					

With regard to the influence of experience on getting a job, 124 males (22.18 percent) and 42 females (9.03 percent) said their experiences had influenced them very much (Table 21). An additional 112 of the males, or 20.36 percent, and 40 of the females, or 8.79 percent, responded that there was some influence.

Table 21. Did Experience Assist You in Obtaining Employment?

	<u>Very Much</u>		<u>Some</u>		<u>None</u>		<u>Not Applic.</u>		<u>Total</u>	
	No.	%	No.	%	No.	%	No.	%	No.	%
<u>Males</u>										
Armed service	16	2.90	32	5.81	97	17.60	406	73.68	551	100.00
Job-related	51	9.26	44	7.99	35	6.36	421	76.41	551	100.00
Part-time emp.	57	12.26	36	7.74	39	8.39	333	71.61	551	100.00
Totals	124		112		171					
<u>Females</u>										
Job-related	23	4.95	15	3.23	12	2.58	415	89.25	465	100.00
Part-time emp.	19	4.09	25	5.38	8	1.72	413	80.81	465	100.00
Totals	42		40		20					

The figures regarding the experience which influenced choice of school and employment do not, at first, seem impressive. However, prior armed service was a significant influence. Of the 89 males who reported that they had been in service prior to enrollment in the schools, 71 replied that their service experience was of at least "some" influence.

That males more frequently than females said their experience influenced them in selecting training and was helpful in getting employment is probably a characteristic of the labor market. Job opportunities or job-related experiences are very narrow for girls of high school age, particularly those kinds of employment which would provide training for office and service jobs.

Job-related experiences do influence some young persons in the selection of their training programs and in their employment, and these experiences are more frequently a positive influence than a negative one.

The job-related experiences of those who were not influenced to take training in that field may also have been important in that experience eliminated a potential field of training or subsequent employment. The apparent positive influence of job-related experience on the selection of a training program is interesting in that many of these experiences, particularly part-time jobs and summer employment, usually occur purely by chance.

Evaluation of Training

One of the questions asked was, "How much did your job depend upon skills and knowledge developed in your training program in school?" Table 22 shows the relationships between training and the first job and between training and the present job. For those persons who evaluated the first job, 13.17 percent said that their job did not depend on their training; the percentage was about the same for the present job. In the present job, 12 percent of the group said their training was of no value. In both instances, over 80 percent of both males and females said that the training had been at least useful.

Table 22. How Much Did Your Job Depend on Your School Training?

	First Job				Present Job			
	Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%
Necessary	154	50.49	169	54.52	216	47.47	245	58.61
Useful	108	35.41	93	30.00	169	36.70	139	33.25
No Value	43	14.98	38	12.26	72	15.82	34	8.13
Total	305	100.00	310	100.00	455	100.00	418	100.00

In an effort to obtain more definitive information, even if the training had not helped in getting a job, the question was asked, "How closely, in your opinion, was the training in school related to your job?"

The data in Table 23 represent the total group response to this question; 16 percent of the sample did not respond. Of those who did, 82.38 percent of the males and 96.28 percent of the females said that the training was at least somewhat related to their present job. The females tended to have jobs which they felt were more closely related to the skills they learned in school than did males. For a few of the males there was a slight difference between the response of the relationship between training and the first job and the relationship between training and the present job. While 17 percent reported their present job to be unrelated to the skill learned in school, almost 11 percent, considerably less, found their training unrelated to their first job.

Table 23. How Closely Was Training Related to Job?

Relationship	First Job				Present Job			
	Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%
Close	169	56.15	190	63.63	369	51.18	361	65.62
Somewhat related	99	32.89	85	28.33	225	31.20	184	30.66
Not related	33	10.96	25	8.33	127	17.62	55	9.17
Total	301	100.00	300	100.00	721	100.00	600	100.00

These results indicate a relatively high level relationship between course and job, and while the education may be useful in obtaining employment, it obviously is not the only factor. Just how important it is is dependent upon the employment practices of businesses and industries.

In response to a related question "What part of your educational program was most valuable?" 61.36 percent of the males and 67.90 percent of the females felt the job skills were most important (Table 24). These results support the supposition of vocational educators that vocational training, and skilled training in particular, is important for employment, at least for those occupations for which training is offered.

Table 24. Of What Value Was Your Training?

Value	Male (No.)	Male (%)	Female (No.)	Female (%)
General education	148	28.74	102	22.37
Job skill	316	61.36	310	67.98
Both	51	9.90	44	9.65
Total	515	100.00	456	100.00

To take the evaluation out of the personal reference, the question was asked whether or not the individual would recommend the vocational, technical, and adult school to another person (Table 25). Ninety-two percent said they would. Again, females responded more favorably than did the males; 95 percent of the females said they would recommend it, while only 89 percent of the males said that they would.

Table 25. Would You Recommend This Program?

Recommendation	Male (No.)	Male (%)	Female (No.)	Female (%)
Yes	463	88.87	435	95.81
No	49	9.40	18	3.96
Yes/No	9	1.73	1	0.22
Total	521	100.00	454	100.00

Additional Education

In response to the question, "Do you think your occupational future will require you to get some more training?" a substantial number of persons said it would be necessary for them to get additional education (Table 26). The bulk of them expressed the opinion that this education should be on-the-job training, but surprisingly large numbers expressed the opinion that additional training would be gotten through vocational schools or colleges.

Table 26. What Kind of Training Will Be Required in Your Future Occupation?

Type of Education	Male (No.)	Male (%)	Female (No.)	Female (%)
College	203	24.78	59	12.69
Vocational training	201	24.54	102	21.94
On-the-job training	354	43.22	271	58.28
Other	61	7.45	33	7.10
Total	819	100.00	465	100.00

The fact is that in the two years and four months between the time of graduation and time of response to the questionnaire, 38 percent of the graduates had already had additional educational

training (Table 27). Two-thirds of them had been enrolled in part-time education and 146 had been or were enrolled in full-time educational programs. The males were more likely to continue their education than were the females.

Table 27. Additional Education Completed

Education	Male (No.)	Male (%)	Female (No.)	Female (%)
NA	288	53.83	332	72.02
Part-time	141	26.36	87	18.87
Full-time	104	19.44	42	9.11
Other	2	0.37	0	0.00
Total	535	100.00	461	100.00

The kind of training they were likely to pursue was similar to the kinds of programs in which they already had been enrolled (Table 28). The largest male enrollment was in trade and industrial courses, while the largest female enrollments were in office and service courses.

Table 28. Type of Additional Education (Program Area)

Area	Male (No.)	Male (%)	Female (No.)	Female (%)
Office	59	35.12	41	57.75
D.E.	9	5.36	0	0.00
T&I	88	52.38	4	5.63
Agriculture	0	0.00	0	0.00
Apprentice	6	3.57	0	0.00
Liberal arts	6	3.57	8	11.27
Health	0	0.00	18	25.35
Total	168	100.00	71	100.00

The reason for taking additional education is indicated in Table 29. A large percentage of the males were taking additional

education for the purpose of advancing on the job. The females, on the other hand, were taking additional general education. This finding is interesting in light of the fact that the females felt that their skills had been more important to them on the job than had general education. A question which arises is whether there is a need for additional general education in the occupation courses given to females in post-high school courses.

Table 29. Purpose of Additional Education

Purpose	Male (No.)	Male (%)	Female (No.)	Female (%)
Advancement	94	39.17	25	19.53
Different				
occupation	24	10.00	12	9.38
General education	54	22.50	63	49.22
Adv. & general				
education	48	20.00	16	12.50
Dif. occupation				
& gen. ed.	12	5.00	9	7.03
Other	8	3.33	3	2.34
Total	240	100.00	128	100.00

Improvements in the Program

Finally, graduates were asked what suggestions they would have for improving the program. Almost 26 percent of them suggested that courses needed improvement. Ten percent suggested that additional courses should be added. More males than females made the latter suggestion. Another 8.5 percent suggested the improvement of instruction. Again, the males made this suggestion more frequently than did the females. While the graduates generally felt that their education was related to their jobs and would recommend the school

to others, they were not hesitant to make suggestions for improvements. These suggestions are, of course, very general in nature and are in a critical area of student-teacher contact. The vocational, technical, and adult schools have by and large concentrated considerable effort on improving courses and developing high standards of instruction. These efforts are not misdirected, but still, 25 percent of the students indicated that the courses could be better.

Table 30. What Can the School Do Better?

Improvements	Male (No.)	Male (%)	Female (No.)	Female (%)
Higher standards	6	1.53	2	0.59
Additional credits	49	12.47	27	7.96
Improved courses	95	24.17	95	28.02
General education	7	1.78	5	1.47
Accredited	21	5.34	9	2.65
Degree offered	3	0.76	0	0.00
Improved instruction	37	9.41	25	7.37
Improved counseling	9	2.29	6	1.77
Effective placement	10	2.54	2	0.59
Update	20	5.09	10	2.95
Public relations	8	2.04	16	4.72
Unknown	32	8.14	30	8.85
None	51	12.98	40	11.80
Excellent	45	11.45	72	21.24
Total	393	100.00	339	100.00

III. Conclusions

The system of vocational-technical and adult education in Wisconsin is essentially one of social service. It is designed to serve society in two ways: (1) to help individuals gain skills and knowledge so that they can become employable and thus productive and

useful members of society; and (2) to provide society's various institutions with able workers, thus maintaining continued productivity and operation of these vital institutions.

This study is an effort to determine to a small degree whether or not these two functions are being served. Its primary concentration, however, is on the first stated purpose. This goal must be achieved before the second goal can be satisfied.

In 1965, 1,855 persons were reported as having successfully completed courses in 29 of Wisconsin's schools of vocational, technical, and adult education. These courses are classified as "full-time" courses--that is, most of the students who enroll in them did so on a full-time basis. The courses were (and are), for the most part, one or two years in length. The exception to this is the apprentice program which may be considered full-time training usually for four years. Most of the apprentice training, however, is on the job, with a certain number of hours of attendance in school required. Apprentices represent approximately 5 percent of the reported graduates. All of these courses are considered to be post-high school, since the students who enroll are, almost without exception, 18 years or older. Most are high school graduates, but many are not.

Of the total sample of graduates, 81.6 percent, or 1,517 individuals, completed and returned a usable follow-up questionnaire in the fall of 1967, approximately two years and four months after graduating. The responses were coded, key punched, and machine processed.

The questionnaire was designed to elicit responses which would give a generalized picture of (1) the group's employment experience, (2) the relationship of the post-high school vocational-technical training program to their employment, and (3) a measure of some factors which influenced their choice of a vocational-technical program.

Of the 1,517 persons responding, 1,016 completed a detailed questionnaire; 501 completed a short-form questionnaire. These two groups were similar in the courses they had completed and in the kinds of jobs they were holding at the time of inquiry, but they were different in other respects. The "short-form" group had a higher rate of unemployment, more males in service, and more females as homemakers; they also had more responses that their training was unrelated to their employment and a wider range of income than the "long-form" group. While the differences were significant, they do not establish an index which could be used for correction of the analysis of the responses to the long-form questionnaire. It is possible, too, that the 18.9 percent who did not respond would have even more different characteristics.

Since most of the analysis was based on the responses of graduates who responded on the long-form questionnaire, it must be kept in mind that these findings are not necessarily representative of the entire 1965 graduating class, and no statistical devices are used to try to make it representative. The responses, and hence the analysis, are representative only of the group of graduates who replied to our inquiry.

Findings

1. Employment

In general, the employment experience of the group was good, at the time of inquiry. Only 2.5 percent were unemployed--lower than the national average. While 26.7 percent had experienced unemployment periods of longer than two weeks during the two years and four months since graduation, much of this unemployment was due to illness or family problems. Unemployment for these reasons is not usually considered as unemployment, for such persons are temporarily out of the labor force and are not available for employment.

The jobs held by the respondents appear to be closely related to the courses they completed, and their incomes, both starting and at the time of inquiry, on the average were somewhat below the state average income in manufacturing industries. However, the average increase for the males was almost 33 percent and for the females was almost 25 percent over the period studied. Twenty-five percent of the long-form respondents were engaged in some part-time activity; only one-third of them were in part-time jobs.

While persons in the armed services are not normally considered in the labor force, these experiences were a significant factor in the working history of the males. The fact that 11.07 percent of the males had, or were having, experiences in the armed service makes the discussion of the employment experience of the male group more complex. It affects the reported rates of pay, the relationship of job to training, and the extent of labor market exposure.

2. Relatedness of Vocational Education to the Labor Market

Even though the graduates experienced reasonably good employment which was related to their training, there are some characteristics of the training and employment which need further analysis. The data about courses, jobs, and industries suggest that the vocational schools are serving a rather narrow segment of the labor market. While the traditional categorization of courses into occupational subject fields is not related to the size of the occupational fields (health occupations, for example, is a smaller part of the labor market than any other subject field), one would expect to find a fairly broad distribution of courses and enrollments. There were no graduates in the field of agriculture, there were few male graduates in service occupations, and the number of males and females who graduated from distributive education programs is lower than might be expected.

This finding is directly related to the kinds of jobs in which the graduates were employed--a heavy concentration of males in the craftsman and operative categories and of females in office and service categories. It is also related to the kinds of industry or business employing the graduates. Transportation, public utilities, government, education, and others were not employing many graduates.

It is recognized that this is a difficult problem for the vocational, technical, and adult schools. Generally the schools are responsive to expressed and observable needs of business and industry. Since 1965, when the students in this study graduated, the schools

have added courses in service occupations for males, such as police and fire training. They have also recognized the transportation industry with pilot and airline office training programs, and agriculture with several different kinds of programs. But there are fields of employment with training needs which need further exploration. This suggestion is not made without the realization that the industries and businesses themselves must want and be willing to employ persons trained in vocational schools. The transportation industry, for example, traditionally has trained its own personnel; persons trained in publicly supported schools may not be needed in that industry. Employers of sales personnel have done somewhat the same. Until a few years ago the health field trained its own people in hospitals, clinics, and doctor's offices, but once these employers discovered that the vocational schools could provide quality education in their area, they began to turn to the vocational schools; as a result the schools' health programs have expanded at a surprising rate. The same could be true of other business and industrial occupations.

Nor is the suggestion made to encourage the vocational, technical, and adult schools to assume educational responsibilities which are being handled effectively in other ways. If businesses and industries can satisfactorily supply their own training, they should be encouraged to do so. The vocational, technical, and adult schools should then serve to fill the remaining voids. The suggestion is for exploration of what appear to be possible voids.

3. Relationship of Training to Employment

It would be unreasonable to expect to find that 100 percent of the students would report that their jobs are closely related to their training, for the schools cannot possibly anticipate the needs of all individuals, or of the industries which employ the students. If they could do this half the time, they would be doing well, particularly in this rapidly changing labor market. That 51.18 percent of the males and 65.62 percent of the females felt that their training was closely related, and an additional 31.20 percent of males and 31.66 percent of females felt that their training was somewhat related to their present job seems commendable. Also of importance is the finding that 84.17 percent of the males and 91.86 percent of the females felt it was useful in getting their jobs.

Even if, as judged, this is a better record than might be expected, nevertheless a large number of students did not find the skills and knowledge they acquired related to or useful in obtaining employment. It is this group which it is important to observe. This does not necessarily imply that the education they received was, or is, useless. Some of these students, by chance, may have found other occupations which offered more opportunity, or they may not have wished to move in order to get employment related to their training. A variety of possible reasons exist.

4. Other Factors Which Influenced Choice of Training and Employment

Individuals have a potentially wide variety of work-related experiences before they enter employment; training is only one of

them. Parents and friends may have had a variety of workshops or hobbies which youths shared. Woodworking tools, machine tools, photographic darkrooms, printing presses, are just a few of the possible things to which a youth might be exposed. In addition large numbers of youths may have had part-time work experiences which might influence their choice of an occupation.

There were 266 responses by males and 61 by females which indicated that such experiences had some effect upon choice of a field of training. About the same number of responses indicated such experiences had an effect upon obtaining employment. The latter was more frequently true for males than for females, and particularly so when those who had had armed services experience were added. The armed services had an effect on the choice of training and subsequent employment of most youths who had been in service. Many youths who had experiences outside of the armed services did not find them to be a factor in favor of a related occupational field, but the experience may have been important in helping to eliminate occupational fields.

It is not known how many persons made multiple responses to these questions, but there are enough positive replies to suggest that such experiences may be very important counseling tools. It also suggests quite aside from the concern for vocational, technical, and adult schools, that some planned related work experiences in high school, or during the high school period, might be an important

aid to students in making occupational choices. This is not a new proposal. The industrial arts and vocational cooperative programs in the high school attempt to do this, and a number of experimental projects, including the "American Industry" program of Stout State University, are based upon this idea. The Explorer Scouts program and the Junior Achievement program are also providing such experiences.

5. Graduates' Evaluation of Their Training Programs

Almost two-thirds of the graduates indicated that the most important part of their educational program was the skill training; about a quarter of them felt that general education was the most important; another 10 percent felt that the two were of equal importance. Since the major difference between a vocational program and a general education program is the emphasis given to skill training, the response is favorable. It may be that the characteristics of the students and their expectations were responsible for this response, but for this group of students, skills were important.

In response to the question, "Would you recommend this program to others?" 88.87 percent of the males and 95.81 percent of the females replied that they would. These percentages are perhaps a better indicator of the value they place on their experiences than their answers to the question, "Was the program valuable to you?" Whinfield had similar responses in another study in which vocational students, even those who did not graduate, expressed more satisfaction with their vocational-technical program than did students in a general program.

6. The Future

The graduates expressed the opinion that they would need more education; the most frequently cited form was "on-the-job." Second most frequently cited was vocational training and college (about equal) by the males, and vocational by the females. Forty-five percent of the males and 28 percent of the females had already obtained additional education at the time of the survey. Such education was frequently in job-related courses.

Twenty-four percent of the males and 28 percent of the females who made suggestions for improving the school suggested that the courses needed improvement. The second most frequently cited suggestion by both males and females was improvement of instruction. That the vocational, technical, and adult schools have been concerned with these two factors is well known by people who have worked with the schools. Courses are continually being reviewed for ways in which they might be made better, and instructors are encouraged (sometimes financially) to get additional education so that instruction will be improved. But what help there is outside of the system itself is loosely scattered throughout the state universities and the University of Wisconsin.

Stout State University is the only institution in the state offering degrees in two vocational subject areas, trade and industry and home economics. The University of Wisconsin, with majors in four subject matter fields and several related fields (educational

administration, nursing education, and others) does not award a vocational education degree, nor does it have a clearly identified department of vocational-technical education. The solution to this problem requires intensified action by supporting training agencies.

Summary

This study suggests that in general the graduates have been satisfied with their post-high school vocation experiences; that they found the educational experience was useful in getting, holding, or changing jobs; and that their experiences outside of school were important in selecting a vocational program as well as in getting a job.

In spite of this expressed satisfaction, the students suggest that courses and instructors need to be improved. To accomplish this, there is a need for assistance from the teacher-preparation institutions and considerable in-depth research on numerous problems. It also appears that the schools offer training for a relatively narrow range of jobs when compared to the total labor market, but it is not clear why.

That vocational, technical, and adult schools will continue to experience growing enrollments seems very clear. A substantial part of this growth may well be in part-time education programs.

The positive aspects of the report tend to overshadow the negative aspects. While the Wisconsin schools of vocational, technical, and adult education are helping a large percentage of the students

who enroll, they are not doing as well with a smaller but significant minority who were not quite so happy with the schools' vocational programs. This study did not even look at students who dropped out, nor at students who might have enrolled had there been more room, more money, a greater variety of programs, and easier access to the programs.

The satisfaction expressed by these graduates should be used to give potential students an idea of the kind of expectations they can have if they enroll in and complete appropriate vocational programs.